Alberta
FORESTRY, LANDS
AND WILDLIFE

KANANASKIS COUNTRY INTEGRATED RESOURCE PLAN
1988/89 ANNUAL REPORT

November 1989

ROCKY MOUNTAIN HOUSE

EASTERN SLOPES
RESOURCE MANAGEMENT
COMMITTEE

Highlights

Eastern Slopes Region, Alberta Forestry, Lands and Wildlife

ANNUAL REPORT (SECOND)

OF THE KANANASKIS COUNTRY INTEGRATED RESOURCE PLAN
1988

This annual report for the Kananaskis Country Integrated Resource Plan is the second in a series which summarizes progress to date on the plan's implementation. The following highlights have been taken from the detailed annual report.

- **ECOLOGICAL RESOURCES** - A significant weed control program has been initiated in the area so that native plant species can be maintained in their natural state for future generations.

Public meetings were held regarding the proposed Plateau Mountain Ecological Reserve.

- **FISHERIES** - A total of 90 500 fish were stocked in over 23 waterbodies throughout the planning area in 1988/89.

- **INTERPRETATION AND ENVIRONMENTAL EDUCATION** - Over 77 000 people participated in the interpretive services in the planning area, with over 270 000 visitor inquiries received. Three hundred seventy teachers and 2500 school children were involved in the environmental education.

Jumpingpound Demonstration Forest was opened during this year. The forest will be used now and in the future to demonstrate the leading forest management techniques in the country. Provincial resource managers regard this initiative as significant in generating a productive dialogue over the best methods of conservation of the forest resource, both in Kananaskis Country and throughout the province.

- **RECREATION** - A continued emphasis has been placed on the development of user safety programs within Kananaskis Country. Three hundred thirty-six emergency situations involving lost or overdue hikers, OHV use or skiing were responded to this year. To enhance the quality of response, a significant number of programs have been developed, including: first aid training; the development of a helicopter rescue system; snow stability awareness program; avalanche control; and water rescue.

- **TIMBER** - Timber management plan for the B7 Management Unit was completed and approved.

Four miscellaneous timber use plans were completed.

Mountain pine beetle monitoring was continued in the Kananaskis and Spray Lakes areas.

There were 15 fires during the year which burned only 8.4 ha.

- **WILDLIFE** - Reports were completed on the Mount Allan sheep and Highwood Valley elk mitigation programs conducted by Fish and Wildlife Division during the 1988 Winter Olympics.

Initiation of the Bow Corridor elk study in response to the high number of elk mortalities on Highway #1 east of Canmore, and the numerous development proposals that may have an impact on elk range in the area.

(cont'd.)

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PLAN IMPLEMENTATION

There have been no significant changes in the direction of the plan during this year.

COMMUNICATION

It is important that we who are involved in the day-to-day administration of the natural resources of this area keep the lines of communication open. This document will be distributed to those who expressed an interest following last years annual report, and will also be made available at the following locations:

1) Turner Valley Ranger Station;
2) Bow Crow Forest Headquarters;
3) Canmore Town Office;
4) Rocky Mountain House Provincial Building, 1st Floor, Regional Co-ordination Services;
5) Elbow Ranger Station; and
6) Canmore Ranger Station.

In addition, the report will be made available through the information centres in Edmonton and Calgary.

We ask you to examine this report and give us your comments as to its format or content. This same document has been sent to our senior management in Edmonton. The report has not been changed for public use. If you are unable to visit the above offices, you may request a copy of the report through the Regional Resource Co-ordinator (address below):

Regional Co-ordination Services
Eastern Slopes Region
Box 1598
Rocky Mountain House, Alberta
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TELEPHONE: (403) 845-8245

Please contact the above office if you would like to receive future copies of this publication.

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1.0 INTRODUCTION

This report summarizes progress to date in the implementation of the Kananaskis Country Integrated Resource Plan. This is the second annual report to be completed since the plan's approval, and covers from April 1988 to March 1989. It identifies projects that have been completed, those not completed (and why) and provides some direction for next year's activities.

The report is intended for use by senior management within the Alberta government as well as by the general public, the ultimate users of our service.

The resource sectors contained within the plan have been used to identify projects that have or will be undertaken so that the plan may be accomplished. These have been documented in terms of management intent, results expected, results achieved and anticipated activities over the coming year. Geographic locations of activities in the planning area are given by resource management area (RMA) in Figure 1.

It is hoped that making this document available on an annual basis will result in long-term dialogue over management of the area.

2.0 ECOLOGICAL, NATURAL AND CULTURAL RESOURCES

The requirement for management of these resources is widely based in provincial and federal legislation (e.g., Wilderness Areas, Ecological Reserves and Natural Areas Act, Alberta Provincial Parks Act, Alberta Environment Act). The management responsibility of significant ecological resources is dependent on the land administration responsibility and legislation. Alberta Forest Service and Alberta Recreation and Parks are the major agencies involved.

2.1 Inventory

MANAGEMENT INTENT

An inventory of ecological resources will be prepared by Recreation and Parks and the Alberta Forest Service for use during operational programs.

RESULTS EXPECTED	RESULTS ACHIEVED
All resources of Peter Lougheed Provincial Park will be reviewed. This information will will be used to prepare a resource management plan for the park. A comprehensive geomorphic map will be drafted in 88/89. Similar work is ongoing for Bow Valley Provincial Park.	1:50 000 Terrain Inventory Map of Peter Lougheed Provincial Park and detailed inventory of geomorphic features. A 1:7500 Surficial Geology Map of Bow Valley Provincial Park and detailed inventory of surficial features. A detailed vegetation inventory of Bow Valley Provincial Park and the unique Many Springs wetland. Draft resource plans for Peter Lougheed and Bow Valley parks are being developed.

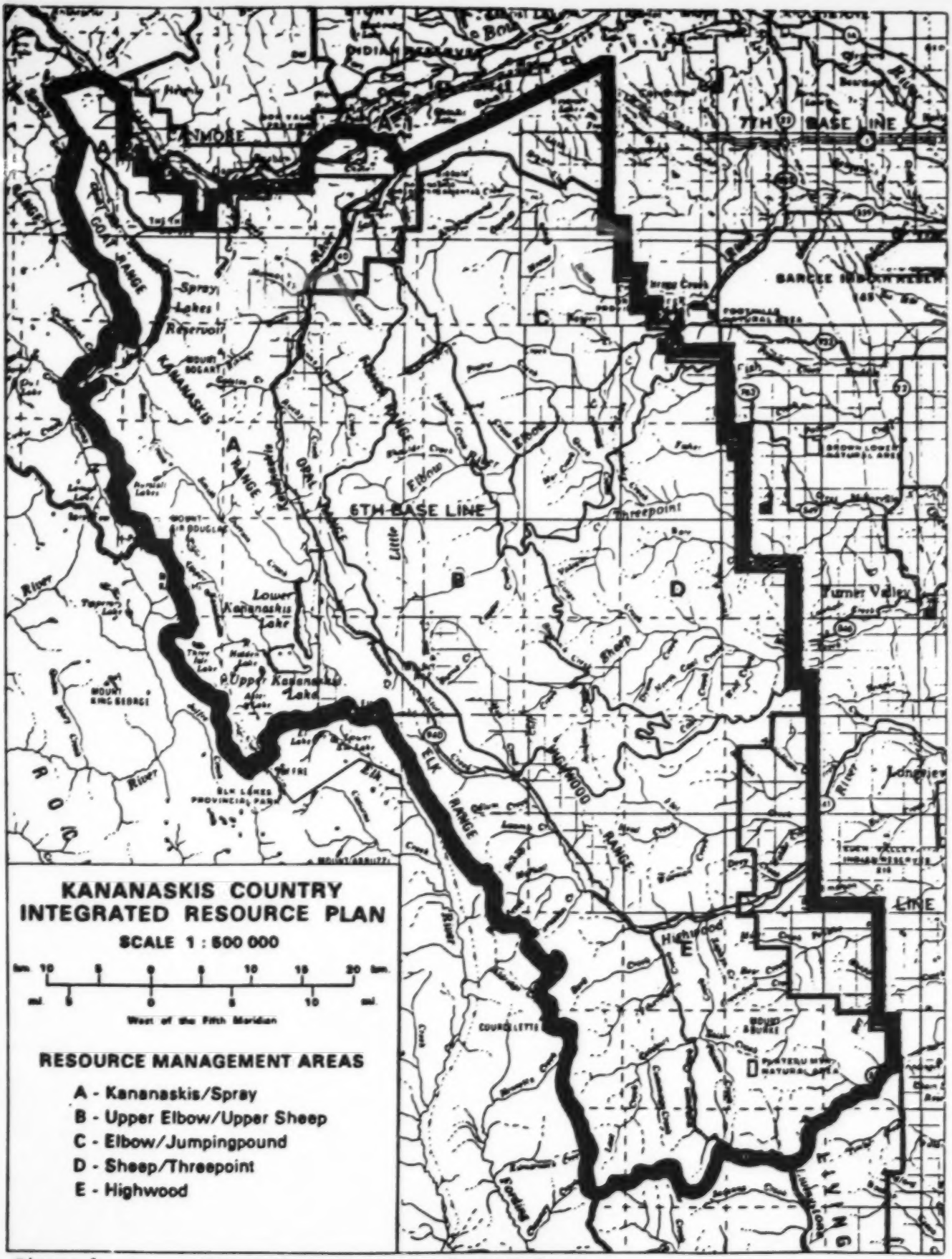

Figure 1. **Resource Management Areas of Kananaskis Country.**

ANTICIPATED ACTIVITIES(1989/90)

1) 1:50 000 Vegetation Map and rare plant inventory of Opal and Kananaskis ranges in Peter Lougheed Provincial Park.
2) Completion of draft resource plans.

2.2 Preservation

MANAGEMENT INTENT

To establish a series of ecological reserves and natural areas to represent Alberta's alpine natural resources.

RESULTS EXPECTED	RESULTS ACHIEVED
Hold public meetings for the proposed Plateau Mountain Ecological Reserve.	Public meetings held in June 1988. Status of candidate area being reviewed by the Advisory Committee on Wilderness Areas and Ecological Reserves.
Volunteer stewards to file their reports on the five natural areas within the planning area; i.e., Mt. Lorette, Moose Mountain, Bragg Creek, Macabbe Creek and Priddis.	Reports were filed for all natural areas except Moose Mountain.

ANTICIPATED ACTIVITIES(1989/90)

Development of a research plan for Plateau Mountain Ice Cave.

Further activities to be determined pending decision regarding status of candidate ecological reserve.

2.3 Weed Control

MANAGEMENT INTENT

To control weeds listed under Weed Control Act and weeds causing rangeland problems, and preserve the vegetation species native to Kananaskis Country.

RESULTS EXPECTED	RESULTS ACHIEVED
Improvement District 5 (ID 5) Weed Inspection Program will continue to inventory disposition lands and notify occupants of weeds. Work by Alberta Transportation and Utilities and Kananaskis Country will continue. Alberta Forest Service will increase its efforts on noxious weed control as well as rangeland control.	Inventory of dispositions accessible by vehicle and government lands in Kananaskis Country was completed through the ID 5 Weed Inspection Program. Contact was established with all oil and gas-related disposition holders regarding weed control responsibilities in ID 5. Several major weed infestations were documented and action was taken. Rangeland weeds were suppressed in RMA C and inventoried in RMA E.

The Kananaskis Country Weed Control Committee continued to facilitate effective communication among government agencies regarding weed inventory and control. The ID 5 Weed Inspection Program also increased communication with neighboring municipalities and non-governmental disposition holders.

Weeds on roadways, recreation facilities and some government facilities were controlled. Rangeland weeds were suppressed in RMA C and inventoried in RMA E.

ANTICIPATED ACTIVITIES(1989/90)

Through the ID 5 Weed Inspection Program weed infestations will continue to be documented on government and disposition lands, and occupants will be notified and given notices accordingly. Restricted, noxious, nuisance and rangeland weeds will be controlled. Alberta Transportation and Utilities will continue to control weeds along public roadsides throughout Kananaskis Country. ID 5 will continue to assist Alberta Forest Service, Alberta Recreation and Parks and non-profit disposition holders with weed control, but will not relieve them of this function. Weed control by other disposition holders will be encouraged and facilitated by ID 5 through established contacts. Inventory of trails, backcountry areas and long distance linear dispositions (LDLDs) will be initiated by ID 5 in co-operation with Alberta Forest Service and Alberta Recreation and Parks. The ID 5 Weed Inspection Program will provide training and information regarding weed inventory for government personnel and disposition holders as required.

3.0 FISHERIES

The fisheries resource area is managed to support a variety of recreational opportunities by:

a) maintaining or increasing natural fish populations;
b) establishing new populations in suitable areas; and
c) protecting or enhancing habitat.

The resource is managed by the Alberta Fish and Wildlife Division.

3.1 Fisheries Management Program

MANAGEMENT INTENT

To establish an optimal level and diversity of recreational angling opportunities. Efforts will be directed toward completing inventories on streams and lakes. Inventories will be undertaken to obtain information on populations, identify key habitat sites (spawning, rearing and overwintering areas) and collect water quality information.

RESULTS EXPECTED	RESULTS ACHIEVED
Continue evaluation to see if new sportfishing regulations (i.e., bait restrictions, size limits, seasons) are helping to allow fish populations to recover.	Baseline data gathered from Canyon Creek to assist in evaluation of regulations.
Evaluation of cutthroat trout plants in five streams.	Evaluation completed on Wilkinson Creek.
Complete evaluation of brook trout reproduction in beaver ponds.	Evaluations completed on several beaver ponds.
Conduct Phase II fisheries inventories in four lakes and three streams.	Phase II fisheries inventories not completed due to the lower priority of these projects relative to work conducted on the upper Bow River outside the planning area.

ANTICIPATED ACTIVITIES(1989/90)

1) Continue evaluating results of new sportfishing regulations.
2) Evaluate cutthroat trout plants in four streams and Hogarth Lakes.
3) Continue evaluation of Elbow Lake nutrient enhancement.
4) Conduct creel survey on Lower Kananaskis Lake to evaluate stocking.
5) Evaluate lake trout plants in Spray Lakes Reservoir.
6) Evaluate introduction of 'Mysis relicta' into Spray Lakes Reservoir.

3.2 Fisheries Habitat Enhancement Program

MANAGEMENT INTENT

To increase fish populations and recreational angling opportunities. Effort will be placed on identification, development and implementation of projects through "Buck for Wildlife" funding and through government and/or industrial projects.

RESULTS EXPECTED	RESULTS ACHIEVED
Annual inspections and maintenance of water control structures.	Inspections and necessary maintenance completed on all structures held by the Fish and Wildlife Division.
Review other fisheries habitat enhancement projects as identified over the next six months.	Recommendations made on four projects; i.e., Wedge Pond, Elbow Lake, Forgetmenot Pond, Spillway Pond.

Completion of Buller Lake excavation and site reclamation.	The project is 90 percent complete and final reclamation will occur during the summer of 1989.
Continue evaluation of Elbow Lake nutrient addition project.	The age and growth rate of brook trout were evaluated from a sampling of Elbow Lake population. It was determined from the samples that nutrient addition has increased the growth rates; however, it is uncertain how long this benefit will last.
Evaluate enhancement of Rummel and Watridge lakes.	Lake enhancements were evaluated.

ANTICIPATED ACTIVITIES(1989/90)

1) Annual inspections and maintenance of control structures.
2) Review or identify enhancement projects.
3) Negotiations for repair of Bear Pond water control structure are underway. The project has received Kananaskis Country Integrated Committee (KCIC) endorsement and will likely be funded jointly through Alberta Environment and the Buck for Wildlife Program.

3.3 High Mountain Lakes Program

MANAGEMENT INTENT

To provide a quality backcountry fishing experience. Efforts will be directed toward identifying new lakes for expanding opportunities and maintaining undeveloped access.

RESULTS EXPECTED	RESULTS ACHIEVED
Complete Phase II fisheries inventory on Stenton Lake.	Phase II fisheries inventory on Stenton Lake not completed due to its lower priority relative to other projects outside the planning area.
Continue creel survey on high mountain lakes.	Data gathered from surveys; evaluation of data ongoing.

ANTICIPATED ACTIVITIES(1989/90)

Continue creel survey on high mountain lakes.

3.4 Trout Stocking Program

MANAGEMENT INTENT

To provide sportfishing opportunities in areas where trout do not occur naturally or are not maintained through natural reproduction. Some species, such as lake or cutthroat trout, will be introduced into new areas to extend the range of these species as self-sustaining populations.

RESULTS EXPECTED

Continue stocking of various lakes and beaver ponds.

RESULTS ACHIEVED

LOCATION	NUMBER	SPECIES	DATE
East Memorial Lake	150	CT	Aug
Kananaskis Beaverpnds	10000	EB	June
Lillian Lake	460	CT	Aug
Mt. Lorette Ponds	4950	RB	May,Aug
Mt. Lorette Ponds	800	RB(c)	Jul,Aug
Shark Lake	480	CT	Aug
Wedge Pond	3140	RB	May,Jul
West Memorial Lake	390	CT	Aug
Allen Bill Pond	3550	RB	May,Aug
Allen Bill Pond	670	RB(c)	Jul,Aug
Forgetmenot Pond	750	RB	May
Forgetmenot Pond	940	RB(c)	Aug,Sep
Lake Rae	1050	CT	Aug
McLean Pond	7100	RB	May,Jul
North Sunken Lake	430	RB	May
Sibbald Cr. Dams	2540	RB	May
Sibbald Lake	1700	RB	May
Sibbald Meadow Pond	3550	RB	May,Jul
South Sunken Lake	460	RB	May
Carnarvon Lake	980	CT	Aug
Highwood Beaverponds	460	RB	June
Invincible Lake	600	CT	Aug
Lower Kan. Lake	20000	RB	Aug
Lower Kan. Lake	190	RB(c)	July
Maude Lake	2360	CT	Aug
Sparrow Egg Lake	2800	RB	May
Upper Kan. Lake	20000	RB	July

Legend: RB = Rainbow Trout
CT = Cutthroat Trout
EB = Eastern Brook Trout
(c) = Catchable size

ANTICIPATED ACTIVITIES(1989/90)

Continue stocking program on various lakes and beaver ponds.

3.5 Fisheries Habitat Protection

MANAGEMENT INTENT

To minimize impact of land use activities on the fish habitat and populations of the planning area. This is accomplished by involvement in the departmental and interdepartmental planning and referral systems, through which fish habitat protection and migration conditions are placed on land and water use dispositions. To investigate environmental emergencies.

RESULTS EXPECTED	RESULTS ACHIEVED
To review and provide input to land use referrals and planning activities in the area.	Fish and Wildlife input to the referral system was maintained.

ANTICIPATED ACTIVITIES(1989/90)

To continue with the current program.

4.0 INTERPRETATION AND ENVIRONMENTAL EDUCATION

Alberta Recreation and Parks, Alberta Fish and Wildlife and the Alberta Forest Service provide the public with information regarding the natural and cultural resources found in Kananaskis Country.

4.1 Visitor Services

MANAGEMENT INTENT

The Visitor Services section of the Operations Branch of Kananaskis Country, Alberta Recreation and Parks, is responsible for the lead role in Interpretive Services, Information/Orientation Services and Environmental Education Services within Kananaskis Country.

RESULTS EXPECTED	RESULTS ACHIEVED
Interpretive Services:	
Provide personal interpretive services for the natural and cultural history of Kananaskis Country and related management concerns.	Over 77 000 visitors participated in interpretive services during 1988.

Information/Orientation Services:	
Provide the public with information regarding the recreational opportunities and facilities, and management and safety concerns.	Over 276 000 visitors were contacted personally by the information staff in this program area in 1988. Travel Alberta turned over the operation of Barrier Lake and Gooseberry information centres to the Operations Branch of of Kananaskis Country.
Environmental Education Services:	
Provide environmental education services to teachers and group leaders.	Over 370 teachers and group leaders participated in environmental education workshops, ultimately affecting over 19 000 children.
Provide direct instruction to children at schools and campgrounds.	Over 2500 children participated in environmental education programs in Kananaskis Country in 1988.
Resource Management Education:	
Maintain existing level of visitor services at Kananaskis Forest Experimental Station.	Visitor services were provided to the general public, tour groups and schools.
Open Jumpingpound Demonstration Forest May 2, 1988. This demonstration forest will provide visitors with a self-guided driving tour, interpretive centre, day use area and walking trails. Current forest management techniques will be demonstrated.	Jumpingpound Demonstration Forest was officially opened on May 2, 1988.

ANTICIPATED ACTIVITIES(1989/90)

Operation and maintenance of Jumpingpound Demonstration Forest. Resource kits to be developed for school teachers as a teaching aid.

5.0 RECREATION AND TOURISM

Government agencies and private organizations are involved in designing and developing recreation/tourism facilities. Although major funding has ended for the 1988 Winter Olympics developments and Kananaskis Village, minor developments and upgrading will occur. Alberta Recreation Parks is responsible for managing the recreation facilities. Alberta Tourism is responsible for providing business incentives and advice. The Alberta Forest Service is active in backcountry management and has the mandate for managing commercial recreation activities such as trail riding.

5.1 Impact

MANAGEMENT INTENT

To manage recreation impacts on backcountry campgrounds and random use sites.

RESULTS EXPECTED	RESULTS ACHIEVED
Further inventory and small scale revegetation will occur annually.	Ongoing monitoring, revegetation and site work occurring to minimize impacts at designated backcountry campsites. Site plan completed for Lillian Lake. Alberta Forest Service conducted over 100 backcountry patrols, and 122 random campsites were inventoried. Four main campsites were cleaned up in addition to those cleaned routinely during patrols.

ANTICIPATED ACTIVITIES(1989/90)

1) Ongoing monitoring, site work, revegetation and efforts to inform visitors about low impact hiking and camping.
2) Continuation of backcountry management efforts. Increased user contact and education.

5.2 Private Sector Developments and Operation

MANAGEMENT INTENT

To develop recreation and tourism facilities that fit the theme of Kananaskis Country, and provide for private sector opportunities.

RESULTS EXPECTED	RESULTS ACHIEVED
RMA A: Private campground proposal for Bow Valley South under review.	Detailed plans approved - lease and development permit not yet issued.
A concept plan for a Spray Lakes campground is in preparation.	Preliminary concept approved.
Additional hiking and ski trails for the Kananaskis Village have been approved.	No new trails in 1988.
Completion of loop 2 golf course housing.	Completed.

A conceptual facility plan for the Spray Lakes area was completed in April 1988 and forwarded to KCIC for approval. The plan was approved in 1988 and provides direction for facility development in the Spray Lakes area.

ANTICIPATED ACTIVITIES(1989/90)

Review and possible expansion of commercial trail riding operation base camp facilities in RMA A (boundary stables).

5.3 Public Facilities and Opportunities

MANAGEMENT INTENT

To develop standard Kananaskis Country recreational facilities and provide recreation opportunities for which there is a demonstrated demand. These will all meet acceptable standards of environmental and land use impacts and conflicts.

RESULTS EXPECTED	RESULTS ACHIEVED
RMA D:	
Complete landscaping at new Sheep Ranger Station at Long Prairie Creek.	Completed.
Develop new trail-head parking area on Moose Mountain Ridge.	To be completed in 1989.
Develop 12 km of new cross country trails at West Bragg Creek in joint project with AFS.	10 km completed; balance to be finished in 1989.
RMA E:	
Continue upgrading Cataract Creek snowmobile trails.	Minimal upgrading completed.

ANTICIPATED ACTIVITIES(1989/90)

1) RMA A - Develop hiking trail to Rawson Lake.
2) RMA C - Complete Moose Ridge and Ings Mine day-use areas.
3) RMA D - Develop Sandy McNabb trail-head and overflow campground.
4) RMA E - Complete plan for Cataract Creek off-highway vehicle (OHV) trails.

5.4 Public Information

MANAGEMENT INTENT

To provide information on recreation and tourism opportunities.

RESULTS EXPECTED	RESULTS ACHIEVED
Provision of personal contacts at travel information centres and distribution of brochures at administration and agency offices.	Brochures for hiking, skiing, safety, etc., were provided. Eight information centres at Barrier Lake, Gooseberry, Bow Valley, Peter Lougheed, Elbow Ranger Station, Canmore, Bow Crow Forest Headquarters, and Calgary offices of Kananaskis Country were the major areas that distributed information and provided for personal contact.

5.5 User Safety

MANAGEMENT INTENT

To continue the training and upgrading of Kananaskis Country staff with all aspects of the public safety program.

RESULTS EXPECTED	RESULTS ACHIEVED
Training of Kananaskis Country staff for high angle technical rescues (summer and winter).	Responded to 336 emergency situations involving lost/overdue persons, motor vehicles/OHVs, skiing and various other types of accidents. An ongoing program has been developed because of the complexity and serious commitment needed to accomplish such missions.
Helicopter flight rescue system training for Kananaskis Country ranger staff.	A high priority specialty rescue system which eliminates extended evacuation times.
First aid training program for Kananaskis Country staff.	Ongoing program to all staff with on-the-job safety, and to help with the safety of the public.
Backcountry snow stability awareness program.	Ongoing program to inform the public about problems and hazards during winter backcountry travel.
Avalanche control program.	Ongoing program to eliminate hazardous situations for all public travel along highways in Kananaskis Country. Draft version of the avalanche atlas for roads completed.

Water rescue program for Kananaskis Country rangers.	Ongoing program to increase awareness and severity of commitment with all aspects of the water environment. Elbow River map for canoeing and kayaking completed.

ANTICIPATED ACTIVITIES(1989/90)

Due to the need to increase the skill levels of the staff, the training public safety programs will be an ongoing commitment to safety for Kananaskis Country Response Team members. Avalanche activity records will be computerized and a draft version of a backcountry avalanche atlas will be completed.

5.6 Visitor Statistics

MANAGEMENT INTENT

To determine the numbers of visitors (overnight and day only) using each facility and management areas.

RESULTS EXPECTED		RESULTS ACHIEVED		
Ongoing monitoring.	**VISITORS**	**1986/87**	**1987/88**	**1988/89**
Complete day visitor calibration for highways 1 and 1A.	Campers	417 391	444 487	442 172
	Day Users	273 275	253 373	N/A
	Day Use Visits	N/A	N/A	4 737 445

ANTICIPATED ACTIVITIES(1989/90)

Ongoing visitor count at facilities.

6.0 RANGE RESOURCES

The range resources on the Forest Reserve in Kananaskis Country are divided into 17 grazing allotments. At present, there are 69 permittees who graze cattle on these allotments. The Alberta Forest Service is responsible for the management of the forage resource through the development of the range management plans for the allotments and the allocation of livestock.

6.1 Livestock Management

MANAGEMENT INTENT

To manage domestic livestock to achieve uniform forage use, maintain healthy range conditions and intensify range management practices.

RESULTS EXPECTED	RESULTS ACHIEVED
Monitor and assess range conditions and management practices.	Range study for Bow Valley Park completed by Alberta Forest Service (AFS).
Review and update management plans.	Range conditions and management practices were monitored during range allotment inspections. Draft range management plans have been prepared for the following allotments: South Sheep, Highwood, Sullivan Flats, North Sheep, Cataract Creek, Willow Creek, Elbow, McLean Creek and Fish Creek.

ANTICIPATED ACTIVITIES(1989/90)

1) Update grazing plan for Bow Valley Park.
2) Continue monitoring range conditions and management practices.
3) Approve range management plans as noted above. Range surveys and preparation of range management plans will be undertaken for the following allotments: Pekisko and Sheppard-Stimson.

6.2 Stocking Levels

MANAGEMENT INTENT

Maintain the 1977 stocking levels while ensuring a good forage land base.

RESULTS EXPECTED	RESULTS ACHIEVED
Monitor stocking rates and assess range condition.	Mid-season and annual inspections carried out on all range allotments.
Continue with range improvements according to the range management plans.	Disposal of brush piles on approximately 118 ha.

Continue with maintenance program to control woody regrowth.	Maintenance program included: approximately 115 ha mechanically dragged; approximately 171 ha disced and seeded; and approximately 76 ha treated by herbicide application.

ANTICIPATED ACTIVITIES(1989/90)

1) Monitor stocking rates and assess range conditions.
2) No new improvement projects will be initiated until the maintenance program is in line with previously cleared land.
3) Continuation of maintenance program based on approved budget allocations.

7.0 RESEARCH

Two universities maintain research field stations (Kananaskis Centre for Environmental Research and R.B. Millar Research Station) which attract numerous researchers from Alberta and other provinces/countries. In addition, the Geological Survey of Canada is very active in this area. Numerous conference groups use Kananaskis Country for field trips. Research permit systems are required by legislation through Alberta Fish and Wildlife, Alberta Recreation and Parks, Alberta Culture and Multiculturalism and the Alberta Forest Service. Certain federal agencies also maintain permit systems.

7.1 Encouragement of Research

MANAGEMENT INTENT

To facilitate and encourage university and government research.

RESULTS EXPECTED	RESULTS ACHIEVED
Distribution to government offices and universities, and periodic updated data bases.	Kananaskis Country computerized bibliography edited by government agencies. Searches and printouts provided to 15 university researchers. Young Scientist Program initiated by University of Calgary. Thirteen Alberta Recreation and Parks Research and Collection Permits were granted. Research access to Plateau Mountain Ice Caves was given to a small party of Soviet cave specialists (speleologists).

The Geologic Survey of Canada completed an open file Bedrock Geology Map (1:50 000 of Peter Lougheed Provincial Park).

Environment Canada (Atmospheric Environment Services) and Alberta Environment (Flow Forecasting Division) both established new automatic climate stations.

ANTICIPATED ACTIVITIES(1989/90)

Major literature sources to be reviewed for updates.

8.0 TIMBER RESOURCES

Maintenance of the forest land base and annual allowable cut of the planning area are the responsibility of the Alberta Forest Service. This responsibility also includes forest protection (against fire, insects and disease), reforestation and the administration of public recreational land use throughout the forested portions of the planning areas.

8.1 Harvesting

MANAGEMENT INTENT

1) Logging activity through forest management plans will be integrated with other land use activities such as recreational developments, watershed management, range improvements or fish and wildlife habitat improvements.

2) Landscape logging and other aesthetic harvesting practices will be employed.

3) Harvesting will be done in a manner that will have minimal impact on forage production or livestock and wildlife management.

RESULTS EXPECTED	RESULTS ACHIEVED
Continuation of harvesting annual allowable cut (84 840 m3). Timber cruising will be conducted during the summer of 1989 for an estimated 115 000 m3 of wood for coniferous timber licence or permits and an additional 17 000 m3 for potential permit allocation. Miscellaneous timber use (MTU) areas will be sequenced this spring.	127 489 m^3 (47%) of annual allowable cut for 1986-91 quota quadrant harvested for CTQB070003. Miscellaneous timber use plans completed for the Highwood, Threepoint, Sullivan and Elbow MTU areas. Timber management plan completed and approved for the B7 Forest Management Unit.

ANTICIPATED ACTIVITIES(1989/90)

1) Continue timber quota harvest operations within CTQB670003. Approximately 90 000 m^3 scheduled for harvest operations within B02-L21 (Lost and Cataract Creek areas) over the next three years.
2) Cruising and compilation of two pending post and pole sales (competitive bid) in Sullivan MTU area.

8.2 Protection

MANAGEMENT INTENT

To protect the forest from fire, insects and disease.

RESULTS EXPECTED	RESULTS ACHIEVED
During the winter of 1987/88, the Alberta Forest Service, in cooperation with industry, will increase fire detection and prevention with a goal of reducing fire losses from winter burning projects.	In 1988, action was taken on 15 fires, with approximately 8.4 ha burned. Only one fire occurred during the winter months (approximately 4.5 ha) as the result of winter burning programs.
Continuation of monitoring program for Mountain Pine Beetle in 1988.	Monitoring continued in the Lower and Upper Kananaskis Lakes area. Thirty pheromone baits/traps were set at 10 sites, but there was little indication of successful mountain pine beetle attacks.

ANTICIPATED ACTIVITIES(1989/90)

1) Continuation of forest fire prevention, detection, presuppression and suppression program.
2) Continuation of insect and disease monitoring program.

8.3 Reforestation

MANAGEMENT INTENT

Reforestation of all lands that are in the sustained yield timber land base.

RESULTS EXPECTED	RESULTS ACHIEVED
Intensive forest management program.	Scarification completed in B1-P33 and B1-P32 (Jumpingpound). CTL B7-L25 (West Bragg) - scarification of approximately 80% of 1987-88 harvest area completed by Spray Lakes Sawmills.

	Thinning of approximately 125 ha, covering 28 blocks harvested in 1967-68, was completed.

ANTICIPATED ACTIVITIES(1989/90)

1) Complete scarification on CTL B7-L25 (West Bragg).
2) Initiate and complete inventory and assessment of never-merchantable stands within B7 forest management unit for possible stand conversion under the Public Lands Development Program.
3) Continue evaluation of 10 year (and older) reforested blocks for stand improvement through thinning operations.

9.0 WATER RESOURCES

Water resources management is the responsibility of Alberta Environment, and all water use is regulated by the department. Land use activities are monitored and managed by the Alberta Forest Service and Alberta Recreation and Parks to ensure the integrity of the watershed is maintained. Activities causing soil erosion are of principal concern.

9.1 Flow Forecasting & Flood Prevention

MANAGEMENT INTENT

To prevent ground erosion and flooding of facilities, and reduce sedimentation of streams.

RESULTS EXPECTED	RESULTS ACHIEVED
Major assessments for White Fish Day Use, Bow River Campground, Three Sisters Campground, Kananaskis Country Golf Course, Lower Lake day use area, Pocaterra Group Camp and King Creek compound were carried out by river engineering consultants in 1985 and 1986.	Bank stabilization completed at Bow River Campground.
Riprapping of White Fish day use and Lower Lake day use areas.	A portion of the Lower Lake day use area was riprapped by Kananaskis Country with assistance from Fish and Wildlife Division.
Initiate protection of golf course against river flooding.	Channelizing has reduced incidents of flooding in 1988-89.

ANTICIPATED ACTIVITIES(1989/90)

1) Kovach Pond lining to reduce leakage.
2) Bear Pond dam repair.

9.2 Point Source Management

MANAGEMENT INTENT

Maintenance of water quality. Monitoring point source sedimentation in McLean Creek OHV area.

RESULTS EXPECTED	RESULTS ACHIEVED
Monitor possible sediment point sources in McLean Creek OHV area depending on equipment and manpower.	75% complete. Monitored one site in each of Fish Creek, Fisher Creek, Sylvester Creek and McLean Creek.
Review timber harvest operating plans as required.	Timber harvest operating plans reviewed prior to operations being undertaken and on-site conditions applied as required.

ANTICIPATED ACTIVITIES(1989/90)

Continue monitoring selected sites.

Review timber harvest plans as required.

9.3 Reclamation

MANAGEMENT INTENT

Maintenance of water quality. Minimizing upland soil erosion and stream sedimentation. Reclamation should ensure public safety and enhance the aesthetics of the area.

RESULTS EXPECTED	RESULTS ACHIEVED
Commence feasibility study of Gypsum mine site, Peter Lougheed Provincial Park (PLPP).	Baseline photography taken of Gypsum mine site in PLPP.
Reclaim trails etc., at Marmot Basin watershed study sites.	Marmot Basin - first stages of clean-up completed by various agencies during summer of 1988. Final reclamation proposal completed and funding requested through Alberta Heritage Savings and Trust Fund (AHSTF) for 1989/90.
Refertilize and seed Barrier Dam borrow pit.	Barrier Dam borrow pit - AHSTF funding request rejected.

Recontour old trunk road behind Wasootch repeater.	Wasootch repeater (trunk road) - AHSTF funding request rejected.
Complete slash pile burning on Old Haul Roads-Spray Lakes.	Old Haul Roads-Spray Lakes (slash pile burning) - completed.

ANTICIPATED ACTIVITIES(1989/90)

Complete clean-up of Marmot Basin study site through AHSTF funding.

Continue feasibility study of Gypsum mine site in Peter Lougheed Provincial Park.

9.4 Water Yield Modelling

MANAGEMENT INTENT

Maintenance or improvement of water quality, quantity and flow regime.

RESULTS EXPECTED	RESULTS ACHIEVED
The WRENSS water yield simulation model will be put on the Forest Land Use GIS application and all harvest operations will be simulated to ensure water yield is maintained or increased.	GIS development expected to begin at AFS provincial headquarters in 1989.

ANTICIPATED ACTIVITIES(1989/90)

GIS development in 1989; expected to be operational by 1990-91.

10.0 LAND USE

Land use is a commonly used term for all activities that relate to the administration/management of resource uses of the land. These activities are the responsibility of the Alberta Forest Service and Public Lands Division for land administered by the Department of Forestry, Lands and Wildlife. Kananaskis Country Division is responsible for land administered by the Department of Recreation and Parks. ID#5 is responsible for issuing development permits and zoning.

10.1 Referrals

MANAGEMENT INTENT

To ensure that land use activities are integrated and conform with the management intent of Kananaskis Country Integrated Resource Plan.

RESULTS EXPECTED	RESULTS ACHIEVED
Some increase in referral activity is expected in the next year due to increased commercial development and recreational activity.	A number of applications for land use dispositions were referred through this plan during the past year, as follows: 2 Miscellaneous Leases (plus 5 MLL amendments) 7 Geophysical Programs (plus 1 amendment/revision) 1 Mineral Surface Lease Application 0 Pipeline Agreements 1 License of Occupation Application 6 Easement Applications 2 Protective and Consultative Notations 3 Herbicide Applications 6 Commercial Trail Ride Renewals

ANTICIPATED ACTIVITIES(1989/90)

Continuation of review and referral for land use dispositions upon receipt.

11.0 TRANSPORTATION

Alberta Transportation and Utilities is responsible for the development and maintenance of roads in Kananaskis Country. Some assistance regarding avalanche control is provided by Recreation and Parks.

11.1 Environmental Management

MANAGEMENT INTENT

Roads will be maintained to minimize environmental damage.

RESULTS EXPECTED	RESULTS ACHIEVED
A method to contain contaminated runoff from salt in the maintenance yard is proposed as funding becomes available.	No action has been taken.
Berms will be created around the equipment/ maintenance yard, and vegetation will be planted for screening purposes.	No action has been taken.

ANTICIPATED ACTIVITIES(1989/90)

It is intended that action be taken in the coming year (1989/90).

11.2 Safety

MANAGEMENT INTENT

Roads will be maintained to ensure a high level of public safety.

RESULTS EXPECTED	RESULTS ACHIEVED
Avalanche control will be upgraded with installation of climate station instrumentation. Recommendations from the rockslide study will be implemented.	Regular monitoring and assessment of avalanche hazard was carried out where required. Various control measures (e.g., bombing) were taken during 88-89 winter on Highway 40 and the Spray Lakes/Smith-Dorien Trail.

ANTICIPATED ACTIVITIES(1989/90)

Monitoring and control of avalanche hazard will continue for areas that threaten public roadways.

12.0 WILDLIFE

Wildlife is managed in this plan to provide a variety of recreational and commercial opportunities, and to set future demands on viable and diverse wildlife populations for a full range of species, including;

a) ungulates;
b) furbearers; and
c) scarce species (e.g., fisher).

Wildlife resources are managed by the Fish and Wildlife Division, Alberta Forestry, Lands and Wildlife.

12.1 Wildlife Habitat Protection

MANAGEMENT INTENT

To provide input to government referral systems dealing with applications for use of public lands in the planning area, and to provide representation to local planning activities that deal with matters of land use control. Input will be directed toward protection of fish and wildlife resources and habitat, and will indicate mitigative actions required.

RESULTS EXPECTED	RESULTS ACHIEVED
Continue involvement in land use referral system and local planning activities.	Land use applications reviewed and conditions applied. Input provided to planning activities.

ANTICIPATED ACTIVITIES(1989/90)

Continue involvement in land use referral system and local planning activities.

12.2 Wildlife Habitat Enhancement Program

MANAGEMENT INTENT

To develop and implement enhancement projects that will help to increase the carrying capacity of wildlife habitat. Emphasis will be given to enhancing ungulate winter ranges.

RESULTS EXPECTED	RESULTS ACHIEVED
Completion of brush pile burning at Mt. Allan and Wind Valley.	Burning not completed at Mt. Allan due to weather conditions.
Completion of Mist Creek burn in spring of 1988.	This was not undertaken due to unfavorable site conditions.
Review other wildlife habitat enhancement projects as identified within the next six months.	No additional projects identified.

ANTICIPATED ACTIVITIES(1989/90)

1) Completion of brush pile burning in Wind Valley and Mt. Allan.
2) Completion of Mist Creek burn.
3) Identify or review future enhancement projects.

12.3 Wildlife Management Program

MANAGEMENT INTENT

To manage populations of all wildlife species indigenous to the area at levels in harmony with long-term carrying capacity of the habitat. Management objectives include providing opportunities for use of these wildlife populations by the public, in a manner that does not jeopardize the natural well-being, abundance and distribution of these wildlife resources.

RESULTS EXPECTED	RESULTS ACHIEVED
Complete Mt. Allan management project.	Mt. Allan project completed and report published in Proceedings of Northern Wild Sheep & Goat Council. The extensive sheep mitigation actions appear to have been successful, with sheep numbers on Mt. Allan remaining fairly stable and apparently consistent with population trends in surrounding areas.
Complete assessment of Highway #40 mitigation.	Assessment of Highway #40 wildlife mitigation complete. Mitigation activities including winter feeding and establishing a wildlife control zone; special enforcement patrols appear to have been successful in protecting the Highwood elk population from poachers. However, the success of the program was greatly aided by the very mild weather conditions in the winter of 1988/89 and lower than expected traffic volumes.
Complete Sheep River Sanctuary sheep die-off monitoring project.	The sheep monitoring project is ongoing.
Complete assessment report on human/wildlife interactions.	Assessment report not completed.
To initiate an elk population study in the Bow Corridor east of Canmore.	A Bow Corridor elk study project has been initiated by Fish and Wildlife. This study will run for three years if adequate funding can be obtained.

ANTICIPATED ACTIVITIES(1989/90)

1) Continue monitoring Mt. Allan-Wind Ridge bighorn sheep herd productivity and status.
2) Continue normal monitoring of the Highwood Valley elk herd numbers.
3) Continue to co-operate with the University of Calgary's bighorn sheep tagging and monitoring project at the Sheep River Sanctuary.
4) Commence field component of the Bow Corridor elk status study.
5) Conduct routine sheep population surveys in the Kananaskis area.

13.0 SUMMARY

The implementation of the Kananaskis Country Integrated Resource Plan is on schedule. A brief summary of the implementation follows:

1) Protection
- continued emphasis on the development of portions of Plateau Mountain as an ecological reserve.
- maintenance of a strict weed control program.
- continued involvement in research with 13 research and collection permits allowed this year.

2) Management
- focus on interpretation (77 000 people this year) and environmental education (350 teachers to 2500 children).
- enhancement of user safety services which responded to 336 emergency situations this year.
- maintenance of the annual allowable cut which sustains the forest communities.
- a total of 90 500 fish were stocked in over 23 waterbodies in the planning area in 1988/89.
- reports were completed for the Mt. Allan sheep and Highwood Valley elk mitigation programs conducted by Fish and Wildlife Division during the 1988 Winter Olympics.
- initiation of the Bow Corridor elk study in response to the high number of elk mortalities on Highway #1 east of Canmore, and the numerous development proposals that may have an impact on elk range in the area.

3) Development
- significant interest has been expressed in the development of commercial recreation. To date, the approval of new projects is slow and in keeping with the objectives and guidelines expressed in the Kananaskis Country Integrated Resource Plan.

If you have any comments relating to this report, please bring them to the attention of:

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